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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,510	01/15/2004	Jeffrey Rogers	B-4757NP 621648-9	7058
36716	7590	03/26/2008		
LADAS & PARRY 5670 WILSHIRE BOULEVARD, SUITE 2100 LOS ANGELES, CA 90036-5679			EXAMINER NGUYEN, DUNG T	
			ART UNIT 2828	PAPER NUMBER
			MAIL DATE 03/26/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/759,510

Applicant(s)

ROGERS ET AL.

Examiner

DUNG T. NGUYEN

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13,15-34 and 39 is/are pending in the application.
- 4a) Of the above claim(s) 8,17 and 29 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13,15,16 and 18-22 is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,10-12,23-26,28,33,34 and 39 is/are rejected.
- 7) ☒ Claim(s) 4,7,9,27,30-32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**OFFICE ACTION**

The indicated allowance filed on 01/02/08 of this application is hereby withdrawn due to the newly found art.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-6, 10-11, 23-26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Rice (5946130).

Claims 1, 10-11, 23, Fig.1 shows a method of coherently combining multiple laser oscillators, comprising:

providing a plurality of lasers 100a-100n;

coupling the plurality of lasers 120a-120nTi;

configuring the coupling between the plurality of lasers so that each laser interacts with at least one other laser; and

pulling an intrinsic frequency distribution of the at least one other laser (phase controller and shifter elements 140a-b & 144a-b are used to make the lasers inphase states. Therefore, it means to pull an intrinsic frequency distribution among each other laser), wherein the interactions between the lasers form a coherent optical output.

Claims 2-3, 24, 26, and 28, Fig.1 shows phase controller and shifter elements 140a-b & 144a-b are used to make the lasers inphase states (col.6, 1.66-67 and col.7, 1.1-37).

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Claims 5-6 and 25, Fig.1 shows a first reflector 110 and means for pumping 115.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 33, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice (5946130) in view of Waarts et al. (6411323). Rice discloses all limitations of the claims except for the laser fiber lengths being within 10% of each other.

Waarts teach the laser fiber lengths being within 10% of each other in col.10, l.20-29.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Rice what is taught by Waarts to operate the fiber lasers with different wavelength (col.10, l.21-22).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rice (5946130) in view of Frankel et al. (2004/0057475). Rice disclose all limitations of the claim except for the low Qs.

Frankel teach the low Qs (para.0026).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Rice what is taught by Frankel to obtain stable and short laser pulses (par.0026).

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***Allowable Subject Matter***

Claims 13, 15-16, 18-22 are allowed because the above prior art fail, taken singly or combined, to disclose the limitation of said combiner comprising a second reflector for receiving light from the an output of the coupler.

Claims 4, 7, 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The above prior art fail to disclose the limitation of a second reflector to receive the coherent output beam.

Claims 9 and 30-32 are also found objected due to their dependency of the above claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6600765 and 7068949.

**Communication Information**

**Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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**Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.**

**Michael Dung Nguyen**

**Primary Examiner**

/Dung (Michael) T Nguyen/

Primary Examiner, Art Unit 2828

already mailed  
3/14/08



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EXAMINER

NGUYEN, DUNG T

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Commissioner for Patents  
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Paper No. 03112008

LADAS & PARRY  
5670 WILSHIRE BOULEVARD, SUITE 2100  
LOS ANGELES, CA 90036-5679

MAR 17 2008

*In re* Application of  
Jeffrey Rogers et. al  
Application No.: 10/759,510  
Filed: January 15, 2004  
For: **METHOD AND APPARATUS FOR COHERENTLY  
COMBINING MULTIPLE LASER OSCILLATORS**

**WITHDRAWAL FROM ISSUE**  
*37 CFR 1.313*

The purpose of this communication is to inform you that the above-identified application is being withdrawn from issue pursuant to 37 CFR 1.313.

The application is being withdrawn from issue because of unpatentability of at least one claim.

The US Patent and Trademark Office records reveal that the issue fee has not been paid. If the issue fee has been submitted, the applicant may request a refund, or may request that the fee be credited to a deposit account. However, applicant may wait until the application is either again found allowable or held abandoned. If the application is allowed, upon receipt of a new Notice of Allowance and Fee(s) Due, applicant may request that the previously submitted issue fee be applied toward payment of the issue fee in the amount identified on the new Notice of Allowance and Fee(s) Due. If the application is abandoned, applicant may request either a refund or a credit to a Deposit Account.

Any question regarding this communication should be directed to Minsun Harvey, Supervisory Patent Examiner, at (571) 272-1835.

The application is being returned to the examiner for consideration of the preliminary amendment and for taking appropriate action.

Janice Falcone, Director  
Technology Center 2800  
Semiconductors, Electrical and Optical  
Systems and Components